

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU

OPN-Rust Remover MOS 2

Version number: 1.0 Revision:

Date of compilation: 2023-01-23

SECT	ION 1: Identification of the substance/mixture and of the	company/undertaking
1.1	Product identifier	
	Trade name	OPN-Rust Remover MOS 2
	Unique formula identifier (UFI)	DFRW-A56M-N00K-KH87
	Other means of identification	
	Article number	66350
	Tariff No.	34031980
1.2	Relevant identified uses of the substance or mixture and uses advise	ed against
	Relevant identified uses	Cleaning agent Professional use Industrial use
	Sector of use	Rustremover
	Uses advised against	Do not use for products which come into contact with foodstuffs. Do not use for private purposes (household).
1.3	Details of the supplier of the safety data sheet	
	OPN-CHEMIE GmbH	
	In der Au 14 57290 Neunkirchen	
	www.opn-chemie.de	
	Competent person responsible for the safety data sheet	Barbara Angelika Gros-Petri
	e-mail (competent person)	baerbel.petri@opn-chemie.de
1.4	Emergency telephone number	
	Emergency information service	Poison Information Center Freiburg +49(0)761/19240

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008 (CLP)

Section	Hazard class	Hazard class and category	Hazard state- ment
3.9	Specific target organ toxicity - repeated exposure	STOT RE 2	H373
3.10	Aspiration hazard	Asp. Tox. 1	H304
4.1C	Hazardous to the aquatic environment - chronic hazard	Aquatic Chronic 3	H412

Code	Supplemental hazard information
EUH066	Repeated exposure may cause skin dryness or cracking

Remarks

For full text of abbreviations: see SECTION 16

The most important adverse physicochemical, human health and environmental effects

Delayed or immediate effects can be expected after short or long-term exposure. Spillage and fire water can cause pollution of watercourses.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP)

Signal word Danger

Pictograms

GHS08



Hazard statements

H304 H373 H412 May be fatal if swallowed and enters airways. May cause damage to organs through prolonged or repeated exposure. Harmful to aquatic life with long lasting effects.

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Precautionary statem	nents
P102 P261 P271 P301+P310 P304+P340 P312 P331	Keep out of reach of children. Avoid breathing spray. Use only outdoors or in a well-ventilated area. IF SWALLOWED: Immediately call a doctor. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell. Do NOT induce vomiting.
P403+P233 P501	Store in a well-ventilated place. Keep container tightly closed. Dispose of contents / container in accordance with national regulations of the disposal.
Additional labelling re	equirements
EUH066	Repeated exposure may cause skin dryness or cracking.

Hazardous ingredients for labelling

Alipahtic, aromatic hydrocarbons Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, aromatics <2-25%

2.3 Other hazards

Results of PBT and vPvB assessment This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not relevant (mixture).

3.2 Mixtures

Description of the mixture

Mixture of substances listed below with nonhazardous additions

Name of substance	ldentifier	Wt% Classification acc. to GHS		Pictograms
Hydrocarbons, C11-C14, n-al- kanes, isoalkanes, cyclics, aro- matics (2-25%)	EC No 925-653-7	50 - < 75	Asp. Tox. 1 / H304 Aquatic Chronic 3 / H412	
	REACH Reg. No 01-2119458869- 15-xxxx			•
Distillates (petroleum), solvent- dewaxed light paraffinic	CAS No 64742-56-9	10 - < 25	Asp. Tox. 1 / H304	
	EC No 265-159-2			~
	REACH Reg. No 01-2119480132- 48-xxxx			
Hydrocarbons, C10-C13, n-al- kanes, isoalkanes, cyclics, aro- matics (2-25%)	CAS No 1174522-09-8	5 - < 10	STOT RE 1 / H372 Asp. Tox. 1 / H304 Aquatic Chronic 3 / H412	
	EC No 919-164-8			•
	REACH Reg. No 01-2119473977- 17-xxxx			
Hydrocarbons, C11-C14, n-al- kanes, isoalkanes, cyclics, aro- matics <2-25%	EC No 926-141-6	5 - < 10	Asp. Tox. 1 / H304	
malics <2-25%	REACH Reg. No 01-2119456620- 43-xxxx 01-2119484819- 18-xxxx			~

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Name of substance	Identifier	Wt%	Classification acc. to GHS	Pictograms
Hydrocarbons, C9-C12, n-al- kanes, isoalkanes, cyclics, aro- matics (2-25%)	EC No 919-446-0 REACH Reg. No 01-2119458049- 33-xxxx	1 – < 5	Flam. Liq. 3 / H226 STOT SE 3 / H336 Asp. Tox. 1 / H304 Aquatic Chronic 2 / H411	

3.3 Remarks

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For full text of abbreviations: see SECTION 16

3.4 Regulation (EC) no. 648/2004 on detergents / Labelling for contents

Aliphatic hydrocarbons. Aromatic hydrocarbons. 30 % and more. 5 % or over but less than 15 %.

SECTION 4: First aid measures

4.1 Description of first aid measures

General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take offi mmediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. Provide fresh air.

Following skin contact

Wash with plenty of soap and water.

Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms and effects are not known to date.

4.3 Indication of any immediate medical attention and special treatment needed none

SECTION 5: Firefighting measures

- 5.1 Extinguishing media Suitable extinguishing media Water spray. BC-powder. Carbon dioxide (CO2). Unsuitable extinguishing media Water jet.
- 5.2 Special hazards arising from the substance or mixture Hazardous combustion products Carbon monoxide (CO). Carbon dioxide (CO2).

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

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Version number: 1.0 Date of compilation: 2023-01-23 Revision: SECTION 6: Accidental release measures 6.1 Personal precautions, protective equipment and emergency procedures For non-emergency personnel Remove persons to safety For emergency responders Wear breathing apparatus if exposed to vapours/dust/spray/gases. 6.2 Environmental precautions Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it. Methods and material for containment and cleaning up 6.3 Advice on how to contain a spill Covering of drains. Advice on how to clean up a spill Wipe up with absorbent material (e.g. cloth, fleece). collect spillage sawdust kieselgur (diatomite) sand universal binder Appropriate containment techniques Use of adsorbent materials. Other information relating to spills and releases Place in appropriate containers for disposal. Ventilate affected area. 6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Recommendations

Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Use only in well-ventilated areas.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities Managing of associated risks

Storage class (LGK)

10

7.3 Specific end use(s)

No further relevant information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

National limit values

Occupational exposure limit values (Workplace Exposure Limits) this information is not available

Relevant DNELs/DMELs/PNECs and other threshold levels

Relevant DNELs of components of the mixture

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Name of sub- stance	CAS No	End- point	Threshol d level	Protection goal, route of exposure	Used in	Exposure time		
Hydrocarbons, C9- C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)		DNEL	44 mg/kg	Human, dermal	Worker (industry)	Chronic - systemic effects		

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Relevant DNELs of components of the mixture								
Name of sub- stance	CAS No	End- point	Threshol d level	Protection goal, route of exposure	Used in	Exposure time		
Hydrocarbons, C9- C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)		DNEL	330 mg/m ³	Human, inhalatory	Worker (industry)	Chronic - systemic effects		

8.2 Exposure controls

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Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

Do not spray in eyes. If required use tight-fitting goggles.

Skin protection

Hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Type of material

NBR: acrylonitrile-butadiene rubber.

Material thickness

> 0,7 mm

Breakthrough times of the glove material

>480 minutes (permeation: level 6)

Other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

Respiratory protection

Operate if possible out of doors or in a well-ventilated place. In case of inadequate ventilation wear respiratory protection. Type: A-P2 (combined filters against particles and organic gases and vapours, colour code: Brown/White). Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

•••		
	Physical state	Liquid
	Colour	Brownish
	Odour	Product specific
	Initial boiling point and boiling range	151 °C at 1 atm
	Flammability (solid, gas)	this material is combustible, but will not ignite readily
	Explosive limits	0.6 vol% - 7 vol%
	Flash point	>60 °C at 1 atm
	Auto-ignition temperature	>200 °C
	Water solubility	Insoluble
	Vapour pressure	0.05 kPa at 20 °C
	Density	0.8 ^{g/} ml at 20 °C
9.2	Other information Other safety characteristics	There is no additional information

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SECT	ON 10: Stability and reactivity
10.1	Reactivity Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".
10.2	Chemical stability See below "Conditions to avoid".
10.3	Possibility of hazardous reactions No known hazardous reactions.
10.4	Conditions to avoid There are no specific conditions known which have to be avoided. Physical stresses which might result in a hazardous situation and have to be avoided High temperatures.
10.5 10.6	Incompatible materials Oxidisers. Hazardous decomposition products
	Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.
SECT	ON 11: Toxicological information
11.1	Information on hazard classes as defined in Regulation (EC) No 1272/2008 Test data are not available for the complete mixture. Classification procedure The method for classification of the mixture is based on ingredients of the mixture (additivity formula). Classification according to GHS (1272/2008/EC, CLP) Acute toxicity Shall not be classified as acutely toxic. Skin corrosion/irritation Shall not be classified as corrosive/irritant to skin. Serious eye damage/eye irritation Shall not be classified as seriously damaging to the eye or eye irritant. Respiratory or skin sensitisation Shall not be classified as a respiratory or skin sensitiser. Germ cell mutagenicity Shall not be classified as a grem cell mutagenic. Carcinogenicity Shall not be classified as a reproductive toxicant. • Specific target organ toxicity - single exposure Shall not be classified as a specific target organ toxicant (single exposure). • Specific target organ toxicity - repeated exposure May cause damage to organs through prolonged or repeated exposure. Aspiration hazard May be fatal if swallowed and enters airways. Other information
11.2	Repeated exposure may cause skin dryness or cracking. Information on other hazards There is no additional information.

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SECTION 12: Ecological information

12.1 Toxicity

Harmful to aquatic life with long lasting effects.

Ordinance on systems for handling water-polluting substances (Ordinance on facilities for handling substances hazardous to water) (AwSV): WGK (Germany) 3, highly hazardous to water

Aquatic toxicity (chronic) of components of the mixture

Aquate toxicity (chronic) of components of the mixture							
Name of substance	CAS No	Endpoint	Value	Species	Exposure time		
Hydrocarbons, C10- C13, n-alkanes, isoalkanes, cyclics, aro- matics (2-25%)	1174522-09-8	EL50	1.19 ^{mg/} l	Aquatic invertebrates	21 d		
Hydrocarbons, C10- C13, n-alkanes, isoalkanes, cyclics, aro- matics (2-25%)	1174522-09-8	EC50	0.328 ^{mg/} l	Aquatic invertebrates	21 d		

12.2 Persistence and degradability

Degradability of components of the mixture						
Name of sub- stance	CAS No	Process	Degradation rate	Time	Method	Source
Hydrocarbons, C10-C13, n-al- kanes, isoalkanes, cyc- lics, aromatics (2-25%)	1174522-09-8	Oxygen deple- tion	13.8 %	4 d		ECHA
Hydrocarbons, C11-C14, n-al- kanes, isoalkanes, cyc- lics, aromatics <2-25%		Oxygen deple- tion	7.3 %	4 d		ECHA
Hydrocarbons, C11-C14, n-al- kanes, isoalkanes, cyc- lics, aromatics <2-25%		Carbon dioxide generation	0 %	3 d		ECHA

12.3 Bioaccumulative potential

Data are not available.

12.4 Mobility in soil

Data are not available.

- 12.5 Results of PBT and vPvB assessment Data are not available.
- 12.6 Endocrine disrupting properties None of the ingredients are listed.
- 12.7 Other adverse effects Data are not available.

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SECTION 13: Disposal considerations

- 13.1 Waste treatment methods
 - Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

Waste treatment of containers/packagings

Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

SECTION 14: Transport information

14.1 UN number or ID number Not assigned 14.2 UN proper shipping name ADN SUBSTANCES WITH A FLASH-POINT ABOVE 60 °C AND NOT MORE THAN 100 °C 14.3 Transport hazard class(es) ADN 9 14.4 Packing group Not assigned 14.5 Environmental hazards Non-environmentally hazardous acc. to the dangerous goods regulations 14.6 Special precautions for user There is no additional information. 14.7 Maritime transport in bulk according to IMO instruments The cargo is not intended to be carried in bulk. Information for each of the UN Model Regulations Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)Additional information Not subject to ADR. Not subject to RID. International Maritime Dangerous Goods Code (IMDG)Additional information Not subject to IMDG. International Civil Aviation Organization (ICAO-IATA/DGR)Additional information Not subject to ICAO-IATA. SECTION 15: Regulatory information 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture Relevant provisions of the European Union (EU) List of substances subject to authorisation (REACH, Annex XIV)/SVHC - candidate list none of the ingredients are listed Industrial Emissions Directive (IED) VOC content 97.21 % Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS) none of the ingredients are listed Regulation concerning the establishment of a European Pollutant Release and Transfer Register (PRTR) none of the ingredients are listed Water Framework Directive (WFD) none of the ingredients are listed Regulation 648/2004/EC on detergents Labelling of contents. Aliphatic hydrocarbons. 30 % and more. Aromatic hydrocarbons. 5 % or over but less than 15 %. Regulation on persistent organic pollutants (POP) None of the ingredients are listed. National regulations (Germany) Ordinance on systems for handling water-polluting substances (Ordinance on facilities for handling substances hazardous to water)(AwSV) Water hazard class 3 (highly hazardous to water)

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Technical instructions on air quality control (Germany)						
Number	Group of substances	Class	Conc.	Mass flow	Mass con- centration	Notation
5.2.5	Organic substances	Class I	5 – < 10 wt%	0.1 ^{kg/} h	20 ^{mg/} m³	3)
5.2.5	Organic substances		≥ 25 wt%	0.5 ^{kg/} h	50 ^{mg/} m³	3)

Notation

 A total mass flow of 0.50 kg/h or a total mass concentration of 50 mg/m³, each of which to be indicated as total carbon, shall not be exceeded (except organic particulate matter)

Storage of hazardous substances in non-stationary containers (TRGS 510) (Germany)

Storage class (LGK)	10 (Combustible liquids)
eterage etage (_eta)	

Country	Inventory	Status
EU	REACH Reg.	Not all ingredients are listed

Legend

REACH Reg. REACH registered substances

15.2 Chemical Safety Assessment

National inventories

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

16.1 Indication of changes (revised safety data sheet)

Alignment to regulation. Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU

Restructuring: section 3, section 9, section 14 Einfügung: UFI: DFRW-A56M-N00K-KH87

16.2 Abbreviations and acronyms

ADN Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways). ADR Accord relatif au transport international des marchandises dangereuses par route (Agreement concerning the International Agreement concerning the International Carriage of Dangerous Goods by Noad). Aquatic Chronic Hazardous to the aquatic environment - chronic hazard. Asp. Tox. Aspiration hazard. CAS Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances). CLP Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. DGR Dangerous Goods Regulations (see IATA/DGR). DMEL Derived Minimal Effect Level. DEC50 Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval. EC No The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union). EINECS European Inventory of Existing Commercial Chemical Substances. ELS0 Effective Loading 50 %: the EL50 corresponds to the loading rate required to produce a response in 50% of the test organisms. ELINCS European List of No		
ADR Accord relatif au transport international des marchandises dangereuses par route (Ágreement concerning the International Carriage of Dangerous Goods by Road). Aquatic Chronic Hazardous to the aquatic environment - chronic hazard. Asp. Tox. Aspiration hazard. CAS Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances). CLP Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. DGR Dangerous Goods Regulations (see IATA/DGR). DMEL Derived Minimal Effect Level. DNEL Derived No-Effect Level. EC50 Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval. EC No The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union). EINECS European Inventory of Existing Commercial Substances. ELINCS European List of Notified Chemical Substances. Flam. Liq. Flammable liquid. GHS "Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations. IATA International Air Transport Association. IATA Int	ADN	
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REACH Registration, Evaluation, Authorisation and Restriction of Chemicals.		
	RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning
the International carriage of Dangerous goods by Rail).		
STOT RE Specific target organ toxicity - repeated exposure.	STOT RE	
STOT SE Specific target organ toxicity - single exposure.		
SVHC Substance of Very High Concern.		
TRGS Technische Regeln für Gefahrstoffe (technical rules for hazardous substances, Germany).		

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU

OPN-Rust Remover MOS 2

Versior Revisi	n number: 1.0 on:	Date of compilation: 2023-01-23		
	VOC VPvB	Volatile Organic Compounds. Very Persistent and very Bioaccumulative.		
16.3	Key literature refe	erences and sources for data		
		No 1272/2008 on classification, labelling and packaging of substances and mixtures. No. 1907/2006 (REACH), amended by 2020/878/EU.		
	International Mai	gerous goods by road, rail and inland waterway (ADR/RID/ADN). itime Dangerous Goods Code (IMDG). Is Regulations (DGR) for the air transport (IATA).		
16.4	Classification pro	cedure		
	Physical and chemical properties. The classification is based on tested mixture. Health hazards. The method for classification of the mixture is based on ingredients of the mixture (additivity formula).			
16.5	List of relevant p	nrases (code and full text as stated in section 2 and 3)		
	H226 H304 H336 H372 H373 H411 H412	Flammable liquid and vapour. May be fatal if swallowed and enters airways. May cause drowsiness or dizziness. Causes damage to organs through prolonged or repeated exposure. May cause damage to organs through prolonged or repeated exposure. Toxic to aquatic life with long lasting effects. Harmful to aquatic life with long lasting effects.		
	Disclaimer			

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.